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BOLDIN/102/PC/US

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EXAMINER

JOSEPH, DENNIS P

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,241	<b>Applicant(s)</b> BOLDIN, ALEXANDER	
	<b>Examiner</b> DENNIS P. JOSEPH	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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**DETAILED ACTION**

1. This Office Action is responsive to amendments filed for application No. 10/527,241 on May 17, 2010. Claims 1-25 and 27-30 are pending and have been examined.

***Continued Examination***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 17, 2010 has been entered.

***Allowable Subject Matter***

3. **Claim 25** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections – 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 1-13, 24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler ( 6,256,015 B1 )**

Adler teaches in Claim 1:

A mouse for a computer system, said mouse capable of entering commands into a computer based on the location of a cursor which can be placed on a computer screen, when moving said mouse across a working surface, and being actuatable by a user to generate a signal to said computer ( **Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor. Respectfully, cursor control using a mouse is well known in the art** ), said mouse comprising:

a casing having a bottom part resting on the working surface and an upper part ( **Figure 7 shows the mouse with a casing with lower and upper parts** ), said casing longitudinally extending from a front end to a rear end and having transversely spaced sides, which are spaced so that said casing is positioned between distal phalanxes of a user's ring and little fingers ( **Figure 7 shows the mouse from a front end to a rear end and Figure 6 shows the transversely spaced sides. Note the casing similarities between Figure 6 and Applicant's**

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**Figure 2** ), and a distal phalanx of a user's thumb, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping said mouse at a naturally relaxed curled fingers and hand position ( **The user may place their fingers in a variety of positions. A standard one is with some of the fingers resting on the surface to provide stability to the mouse** );

a primary button disposed at an upper front portion of said casing so as to be actuated by a user's index finger ( **It is well known that the primary button (left click) is actuated by the user's index finger** ), said primary button having an upper surface, which is angled to the front end of said casing ( **Figures 1 and 7 show the angled structure to the front end of the mouse. Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over corresponding buttons which can be clicked. The primary can be for the left click part, like or 46L** ); and

a primary fingertip receptacle at least partially extending upwardly from said angled upper surface of said primary button and forming a mould around a user's index fingertip, when placed on said angled upper surface of said primary button slightly bent ( **Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R** ),

said primary button being actuated by a force applied tangential to said angled upper surface of said primary button by said index fingertip, when stroking by said index fingertip said angled upper surface of said primary button in a combined down-forward motion against said moulded contact surface. ( **Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent**

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**position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other ); but**

Adler does not explicitly teach "said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with said user's index fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said primary button by said index fingertip, when moving said index fingertip forward or backward against said moulded contact surface by stretching or bending said index finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said primary fingertip receptacle enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user when turning said casing around its axis in said receptacle, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse," and that the primary button can be actuated without "actuating mouse movement."

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures

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show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove area, and in generally a parallel direction to the surface on which the mouse is placed on and this includes moving it in a forward or backward direction.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 2:

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The mouse of claim 1 further comprising:

a secondary button disposed transversely of said primary button at an upper front portion of said casing so as to be actuated by a user's middle finger (**It is well known that the secondary button (right click) is actuated by the user's middle finger**), said secondary button having an upper surface which is angled to the front end of said casing (**Figures 1 and 7 show the angled structure to the front end of the mouse. Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over corresponding buttons which can be clicked. The secondary can be for the right click part, like for 46R**);

a secondary fingertip receptacle at least partially extending upwardly from a said angled upper surface of said secondary button and forming a mould around a user's middle fingertip, when placed on said angled upper surface of said secondary button slightly bent (**Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R**),

said secondary button being actuated by a force applied tangential to said angled upper surface of said secondary button by said middle fingertip, when stroking by said middle fingertip said angled upper surface of said secondary button in a combined down-forward motion against said moulded contact surface (**Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015]**



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**notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other ); and**

a form of a rear part of said casing providing sufficient clearance between an upper surface and a rear surface of said casing, and said user's index and middle fingers being placed in the respective receptacle slightly bent, and a lower palm resting on said working surface, so that said upper surface and said rear surface of said casing do not interfere with said user's index and middle fingers, when the user manipulates said mouse, said form of said rear part of said casing enabling a user to shift said mouse from a neutral position of said user's index and middle fingers, when placed in said respective receptacle slightly bent, by bending said user's index and middle fingers further into a pocket formed by the user's hand, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping or pinching said mouse at a naturally relaxed curled fingers and hand position, so that said mouse does not interfere with said user's palm plane and said user's lower palm resting on said working surface ( **Figures 1 and 7 show the casing providing the angled shape to provide a good ergonomic fit for movement operation without interfering with the user's fingers/lower palm. Furthermore, these figures show a "pocket", the apertures which the fingers go into. Pocket is a broad term as well. As for the location of the various hand parts, this is an intended use of the invention, which is not a patentable distinction, again, not without the sufficient corresponding structure claimed. Please note Adler's Figure 2, for example, and in conjunction with one of ordinary skill in the art would that by simply moving the hand "downward" that the claimed features would be seen ); but**

Adler does not explicitly teach “said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with said user's middle fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said secondary button by said middle fingertip, when moving said middle fingertip forward or backward against said moulded contact surface by stretching or bending said middle finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said secondary fingertip receptacle enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said receptacle, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse,” and that the secondary button can be actuated without “actuating mouse movement.” Furthermore, he does not explicitly teach of the casing not interfering with the lower palm of the user's hand.

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves, which includes moving it in a forward or backward direction. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1.

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In addition, with regards to the heel of the user's hand not interfering with the casing, this is again something that one of skill would realize is possible and could still result in movement of the mouse.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 3:

The mouse of claim 2 further comprising a wheel button disposed between the primary receptacle and the secondary receptacle, said wheel button accessible by at least one of the user's finger when a user's index finger and a user's middle finger are placed in the respective receptacle of the primary and secondary buttons. ( **Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R )**

Adler teaches in Claim 4:

The mouse of claim 2, wherein the primary and secondary receptacles are located on the primary button and the secondary button ( **Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over corresponding buttons which can be clicked. Note in Figures 1 and 6 of the groove that is formed (read as receptacle) ),** respectively, so that a gap between the user's index finger and the user's middle finger being placed in the respective receptacles has a spacing distance, which allows a wheel button to be positioned between them. ( **Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R )**

Adler teaches in Claim 5:

The mouse of claim 3, wherein each said receptacle has a front portion and a center of said wheel is disposed rearwardly from the front portions of said receptacles. ( **Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R. The specific location of the wheel is a design choice )**

Adler teaches in Claim 6:

The mouse of claim 1, wherein said primary receptacle is formed from a moulded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. ( **Figure 6, Column 5, Lines 53-56, shows the finger pad 166**

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**placed in the receptacle which is in a rounded shape. They are symmetrically placed on cover 10 )**

Adler teaches in Claim 7:

The mouse of claim 2, wherein said secondary receptacle is formed from a ~~molded~~ moulded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. ( **Figure 6, Column 5, Lines 53-56, shows the finger pad 166 placed in the receptacle which is in a rounded shape. They are symmetrically placed on cover 10 )**

Adler teaches in Claim 8:

The mouse of claim 4, wherein the user's index and middle fingertips being placed in respective receptacles are elevated from the working surface at a height, which is reduced and defined by an outside diameter of said wheel. ( **Figure 1 shows the receptacles at an elevated height from the working surface. Column 3, Lines 28-30 disclose a third actuating button or wheel may be positioned between 20L and 20R )**

Adler teaches in Claim 9:

The mouse of claim 1, wherein the sides of said casing each have a concave shape, which define a user's thumb, and a user's ring and little fingertips pinching areas. ( **Column 1, Lines 53-56 disclose the concave lower portion for these fingers, for ergonomic purposes )**

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Adler teaches in Claim 10:

The mouse of claim 9, wherein both sides of said casing in a user's thumb and a user's ring fingertip pinching areas are vertical to the working surface over which the mouse moves. ( **Figures 1 and 6 show them to substantially vertical to the working surface** )

Adler teaches in Claim 11:

The mouse of claim 9, wherein a user's side of the distal phalanx of the thumb and a user's ring and little fingertips being placed on the respective pinching areas register with the working surface over which the mouse moves when a user manipulates the mouse. ( **The user may place their fingers in a variety of positions. A standard one is with some of the fingers resting on the surface to provide stability to the mouse** )

Adler teaches in Claim 12:

The mouse of claim 2, wherein a space exists between the user's palm and an upper surface of the rear part of the casing when the user shifts the mouse by stretching or bending the user's index and middle fingers placed in the respective receptacles. ( **Figure 1 shows a space that would exist because of the angled shape of the mouse. This would exist between the palm and the rear part** )

Adler teaches in Claim 13:

The mouse of claim 2, wherein a length of the rear part of the casing measured from the front edge of said primary and secondary receptacles allows a user to shift the mouse from a

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neutral position of the user's index and middle fingers, when placed in said respective receptacle slightly bent, by bending the user's index and middle fingers further in a pocket formed by the user's hand, when a user's lower palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping or pinching said mouse at a naturally relaxed curled fingers and hand position, so that the mouse does not interfere with the user's lower palm resting on said working surface ( **Figures 1 and 6 show the longitudinal depressions 46L and 46R/146L and 146R, which allow the fingers to be placed therein to contact the apertures 44/144. This allows for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. Please see the reasoning applied in Claims 1 and 2 for more details. As for the location of the various hand parts, this is an intended use of the invention, which is not a patentable distinction, again, not without the sufficient corresponding structure claimed. Please note Adler's Figure 2, for example, and in conjunction with one of ordinary skill in the art would that by simply moving the hand "downward" that the claimed features would be seen )**

Adler teaches in Claim 24:

The mouse of claim 2, wherein said primary and secondary buttons each are parts of ends of levers, which longitudinally extend from a common plate on which other ends of the levers are firmly fixed. ( **The buttons are part of the casing plate and have a structure to allow them to be actuated. Furthermore, Figure 10 shows the actuating lever arm )**

Alder teaches in Claim 27:

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The mouse of claim 24, wherein said casing has a cross panel in relation to said sides and said common plane of said casing is inclined toward said front end relative to said cross panel. (

**Figure 1 shows the plate with the buttons therein inclined toward the front end )**

Adler teaches in Claim 28:

The mouse of claim 1 further comprising a mouse sensing system wherein a sensor thereof is located on said bottom part rearwardly from said primary receptacle along a central longitudinal axis of said casing at a distance, which allows the user to effect horizontal cursor movement on a computer screen, when turning said casing around its axis in said primary receptacle, when pushing by the user's thumb or little finger against a respective contact area on a respective side of said casing. ( **Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor by actuating the buttons )**

Adler teaches in Claim 29:

A computer mouse for a computer system, said mouse being capable of entering commands into a computer based on the location of a cursor which can be placed on a computer screen, when moving said mouse across a working surface, wherein said mouse has a casing resting on said working surface, said casing having at least one button disposed at an upper front portion thereof so as to be actuated by a user's finger to generate a signal to said computer ( **Figure 7 shows the mouse, Column 3, Lines 18-29 describe how the mouse is used to send signals to position the cursor. Respectfully, cursor control using a mouse is well known in the art )**, said mouse comprising:



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a moulded structure mounted to an angled upper surface of said button, wherein said moulded structure at least partially extends upwardly from said angled upper surface of said button and forms a mould around a user's fingertip, when placed on said angled upper surface of said button slightly, and which provides a moulded contact surface with said user's fingertip ( **Figure 1 shows the cover 10 on top of the mouse to provide an angled surface as shown. Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R** ), which allows the user to effect vertical movement of a pointer on a computer screen in both up- and downward directions when pushing by said finger against said moulded contact surface, said button being actuated by a force applied tangential to said angled upper surface of said button by said fingertip, when stroking by said index fingertip said angled upper surface of said button in a combined down-forward motion against said moulded contact surface. ( **Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other** ); but

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Adler does not explicitly teach “said mould being tapered upwardly from said angled upper surface of said button at a height, which provides a moulded contact surface with the user's index fingertip which allows the user to move securely said mouse in a forward or backward direction without actuating said button by said index fingertip, when moving said index fingertip forward or backward against said moulded contact surface by stretching or bending said finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, said moulded structure enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said mould, when pushing by a thumb or a little finger of the user against a respective contact area on a respective side of said casing, when operating said mouse.”

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves, in both a forward or backward direction. As for the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove area, and in generally a parallel direction to the surface on which the mouse is placed on.

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It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

Adler teaches in Claim 30:

The mouse of claim 29, wherein said casing has two buttons disposed transversely of each other at an upper front portion of said casing so as to be actuated by a user's index or middle finger (**Figures 1 and 6 show 46L and 46R on the front portion of the casing for the fingers to fit into**), said mouse further comprising:

a moulded structure mounted to an angled upper surface of each button, wherein one moulded structure at least partially extends upwardly from an angled upper surface of a primary button and forms a mould around a user's index fingertip, when placed on said angled upper surface of said primary button slightly bent (**Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part.**

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**Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R ), which provides a sufficient moulded contact surface with said user's index fingertip when placed on said angled upper\_surface of said button slightly bent and a second moulded structure at least partially extends upwardly from an angled upper surface of a secondary button and forms a mould around a user's middle fingertip, when placed on said angled upper surface of said secondary button slightly bent ( Figures 1 and 6 show the apertures which the finger can be placed into to depress the primary button, in the case, for the left click part. Figure 1 shows the groove for forming a mould around the fingertip a little better, such as the longitudinal depressions 46L and 46R ), said buttons each being actuatable by a force applied tangential to said angled upper surface of said button by one of said fingertip when stroking by said respective fingertip said respective angled upper surface of said respective button in a combined down-forward motion against said respective moulded contact surface. ( Column 1, Lines 63-67 disclose the apertures 44/144 are positioned over a corresponding button which can be clicked. The finger is in a bent position along 46L and 46R and when it moves to depress the buttons, the finger is further bent, at a tangential angle. Respectfully, down-forward is a broad term and seeing Adler's Figure 1 and disclosure in Column 3, Lines 31-36, it is clear that the cover is meant to be taper downward and forward over the front end, facilitating hand control in those same directions. Applicant's own disclosure in [0015] notes that stroking is similar to stretching, so the terms are admitted to be within reasonable interpretation of each other ); but**

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Adler does not explicitly teach “said mould being tapered upwardly from said angled upper surface of said button at a height,” “actuating said buttons on moulded contact surface by a force applied generally parallel to said working surface by said index or middle fingertip when stretching or bending said index or middle finger against said respective moulded contact surface,” “which provides a moulded contact surface with a user's middle fingertip, said moulded contact surfaces each allowing the user to move securely said mouse in a forward or backward direction without actuating said buttons each by said index or middle fingertip, when moving said index or middle fingertip forward or backward against said respective moulded contact surface by stretching or bending said index or middle finger in order to effect vertical movement of a pointer on a computer screen in up- or downward direction, respectively, when pushing by said finger against one of said moulded contact surfaces, said moulded structure enabling a user to effect horizontal movement of a pointer on a computer screen without the use of hand or arm movement of the user, when turning said casing around its axis in said mould, when pushing by user's thumb or little finger against a respective contact area on a respective side of said casing, when operating said mouse,” and that the button can be actuated without “actuating mouse movement.”

However, Figures 1 and 16 show the apertures which allow movement of the mouse, such as the in the vertical direction since the fingers are placed into the grooves. Furthermore, these figures show the longitudinal depressions 46L and 46R/146L and 146R, which allow the finger to be placed therein to contact the apertures 44/144 and these can also be used for movement without the use of the hand or arm and can be done just by moving the two fingers in the grooves. As for

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the height, the figures show the protrusion into the finger pads, obviously indicating there is a height as can be seen in Figure 1. Looking at this figure further, the fingertips, which are placed inside the apertures 44, can move the mouse in direction by applying a force, inside the groove area, and in generally a parallel direction to the surface on which the mouse is placed on, which includes in a forward or backward direction.

It is at least obvious to one of ordinary skill in the art that the mouse could be moved by just placing the fingers through the apertures, providing the user with a sense of grip. These figures have the same angling structure as Applicant's as well. Regardless, one of skill would realize that movement could be actuated, or is at least, possible given Adler's structure. It is important to note that if the structure is substantially the same, then the ability to actuate the two, is obvious, if not inherent, with regards to it actually being able to be done.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to actuate the mouse by positioning the fingers onto the finger pads with the motivation that Adler is seeking to design an ergonomic mouse with a good level of comfort and easy actuation of the mouse by the user.

6. **Claims 14-23** rejected under 35 U.S.C. 103(a) as being unpatentable over Adler ( 6,256,015 B1 ) in view of Smith ( 6,348,912 B1 )

As per Claim 14:

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Adler does not explicitly teach that for the mouse, “at least one additional button having a user's index finger contact area and disposed rearwardly from said primary receptacle so as to be capable of being actuated by bending the user's index finger positioned in said primary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips.”

However, in the same field of endeavor, mice, Smith teaches “Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20.” ( **Column 2, Line 9, Figure 1 shows the supplemental buttons 18 and 20** )

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Adler's mouse with the motivation that “The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature.” The user's fingers bend in order to actuate the supplemental buttons.

As per Claim 15:

The mouse of claim 14, wherein a contact portion of the primary receptacle and the index finger contact area of the additional button together form a contact shape that conforms to the shape of the distal phalanx of the user's index finger. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions** )

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As per Claim 16:

The mouse of claim 15, wherein a surface of the contact portion of the primary receptacle is substantially level with a surface of the index finger contact area of the additional button at all points along a boundary between the primary receptacle and the index finger contact area of the additional button. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions )**

As per Claim 17:

The mouse of claim 14, wherein an interior portion of the distal phalange of the user's index finger contacts both a front portion of said primary receptacle and a portion of the contact area of the additional button when the user's index fingertip is positioned in said primary receptacle. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions )**

As per Claim 18:

The mouse of claim 14, wherein said additional button is actuated by bending the index finger and simultaneously pinching the sides of the mouse between the user's thumb and the user's ring and/or little fingertips. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it**



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**can actuate in both directions. In order to actuate the additional button, the finger would be bent inward )**

As per claim 19:

Adler does not explicitly teach that for the mouse, “a second additional button having a middle finger contact area and disposed rearwardly from said secondary receptacle so as to be capable of being actuated by bending the user's middle finger positioned in said secondary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips.

However, in the same field of endeavor, mice, Smith teaches “Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20.” ( **Column 2, Line 9, Figure 1 shows the supplemental buttons 18 and 20 )**

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Adler’s mouse with the motivation that “The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature.” The user’s fingers bend in order to actuate the supplemental buttons.

As per Claim 20:

The mouse of claim 19, wherein a contact portion of the secondary receptacle and the middle finger contact area of the second additional button together form a contact shape that

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conforms to the shape of the distal phalanx of the user's middle finger. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions** )

Adler teaches in Claim 21:

The mouse of claim 20, wherein a surface of the contact portion of the secondary receptacle is level with a surface of the middle finger contact area of the second additional button at all points along a boundary between the secondary receptacle and the middle finger contact area of the second additional button. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions** )

Adler teaches in Claim 22:

The mouse of claim 19, wherein an interior portion of the distal phalange of the user's middle finger contacts both a front portion of said secondary receptacle and a portion of the contact area of the second additional button when the user's middle fingertip is positioned in said secondary receptacle. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions** )

As per Claim 23:

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The mouse of claim 19, wherein said second additional button is actuated by bending the middle finger and simultaneously pinching the sides of the mouse between the user's thumb and a user's ring and/or little fingertips. ( **The combination of Adler and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions. In order to actuate the additional button, the finger would be bent inward )**

### *Response to Arguments*

7. Applicant's arguments considered, but are respectfully not persuasive.

Applicant is thanked for the grammatical changes to make the claim language more clear.

Applicant's arguments are, respectfully, not persuasive. With regards to the pocket limitation, examiner was not arguing that there wasn't support in the specification, but rather, that no special definition was provided, so examiner used a reasonable dictionary definition. As a result, examiner still feels that Adler reference reads on this, please see the previous remarks for more details on this. Sorry if there was confusion about this before, but the point that was trying to be made is that applicant's definition, as well as the dictionary definition, of the term pocket was still read on by the Adler reference.

Examiner disagrees about not making a prima facie conclusion of obviousness. The unmapped limitations were taught in the obviousness part and examiner believes that the differences were actuated and resolved. For the independent claims, only one reference is being used, so there is no need to consider whether a combination would destroy the primary reference.

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Rather, the minor modifications that are being made are obvious ones, if not already suggested by the Adler reference.

When examiner was noting that differences between Adler and the current invention were not being claimed, this was with regards to the mould. Not enough details are being claimed with this limitation and while Applicant argues there is a difference, examiner does not see the patentable difference between a mould and a cover, as the two terms could actually be interpreted to being the same thing; something over the mouse, for example. As for the forces applied, mouse movement is done by stroking/moving of the various fingers and examiner continues to assert that, because of the grooves in the Adler reference for the fingers to slide into, that mouse movement could be made, in any direction, without actuating the button. Applicant's dictionary definition seems to be upheld by the Adler reference, not discouraged by it. Respectfully, this limitation seems obvious, if not inherent, in controlling the mouse. While Applicant argues that it is a paradox of having a hand on the mouse without actuating the button, this seems unclear because Applicant is trying to claim this same feature, so this is confusing as to what is meant here.

Applicant's arguments on Pages 22-25 are related to the differences between a mould and a cover, which was addressed above. Please better claim these differences as currently, examiner does not see a patentable difference as to how a cover **has** to be different from a mould without the appropriate limitations. As for the height, isn't this clearly shown in Adler? A height of a cover is inherent, since Applicant has not claimed any particular non-obvious range (numbers).

Examiner disagrees with Applicant arguing there is no reasonable expectation of success. Please note that there is no secondary reference being used, so most of the case law for that

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particular case is irrelevant. Still, the modifications being made are minor and some of them are simply being pointed out as already being suggested by the Adler reference, so, in examiner's opinion, there is a reasonable expectation of success. Please note that no major modification is being made, so it's hard to expect the functionality of the mouse to change greatly, and thus, a **reasonable** expectation of success should still be expected.

Applicant is advised to overcome the current rejection by better claiming the height of the mould or claim more differences which would differentiate Applicant's mould from Adler's cover. Respectfully, there is not enough detail on this.

### ***Conclusions***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS P. JOSEPH whose telephone number is (571)270-1459. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ

/Amr Awad/

Supervisory Patent Examiner, Art Unit 2629